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AUTHOR	Spuck, Dennis W.
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ABSTRACT

The Program of Special Directed Studies (PSDS) identifies persons with intellectual ability whose academic achievement, as indicated by traditional measures, is inadequate to secure admission to selective colleges. Then, through a program of supervised college courses, special services and individual tutoring, it attempts to prepare these students for a standard degree program. This study seeks to expand the concept of success, traditionally measured by grade point average, into a multidimensional measure which includes grade point average, student self-evaluation, and evaluation of students by faculty. These evaluations are compared with those of regularly enrolled students. A detailed description and analysis of the data derived from the 40 students involved in the program at the Claremont Colleges is presented. Use of this multidimensional measure of success seems to indicate the effectiveness of PSDS. (PR)

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An Analysis of a Multidimensional Success Measure for PSDS Students

PSDS Technical Report

Prepared by

Dennis W. Spuck

Director of Research and Appraisal
for the
Center for Educational Opportunity
Claremont, California 91711

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An Analysis of a Multidimensional Success Measure for PSDS Students

The Program of Special Directed Studies seeks to identify persons with marked intellectual ability and potential whose achievement, as measured by standard tests and school records, is inadequate to secure admission to degree programs at selective colleges and universities. It then aims to prepare a selected group of these students, through a program of carefully planned and supervised college courses, special services, and individual tutoring, to move into a standard degree program at an appropriate level and successfully to complete it.[1] This report seeks to assess the degree to which the PSDS students have been successful thus far at the Claremont Colleges, thus reflecting the success of the program itself.

Success in the Program of Special Directed Studies is ultimately contingent on whether or not its students graduate from college; this criterion would, perhaps, be argumented by certain affective considerations. Prior to graduation, college success is traditionally measured solely by grade point averages. While this measure is inadequate for all students, it is particularly inadequate for students in programs such as PSDS.

This study seeks to expand this limited concept of success into a multidimensional measure. In addition to grade point average, the measure includes student self ratings and detailed student evaluations by faculty members under which the students have taken course work. These faculty evaluations include comparisons to regularly enrolled students, chance of ultimate college success, classroom performance in various categories, and social success.[2] A copy of each of the questionnaires used in this study are included as an appendix.

The data for this analysis, gathered over the 1968-1969 school year, consist of student and faculty evaluations at the end of the fall and spring semesters, first and second semester grade point averages, cumulative grade point averages and fig figures pertaining to the number of students originally enrolled in PSDS and those who remained at the end of the first and second semesters.

Forty students were enrolled in the Claremont Colleges through PSDS in September, 1968. Table I shows the number of students who dropped from the program, who remained in PSDS, who were transfered to regular status at the end of the fall semester 1968 or the spring semester 1969, and who returned for the fall semester 1969. Of the forty students who entered the program for the fall semester 1968, 15% had dropped (see note in Table I), 30% continued in the program, and 55% had been transferred to regular student status prior to the start of the fall semester 1969.

TABLE I

Program Status of PSDS
Students Enrolled Fall 1968
(Percentages Given in Parentheses)

	Dropped	PSDS	Regular Status
September 1968	0 (0.0)	40 (100.0)	0 (0.0)
February 1969	1 (2.5)	37 (92.5)	2 (5.0)
June 1969	4* (10.0)	13 (32.5)	23 (57.5)
September 1969	6* (15.0)	12 (30.0)	22 (55.0)

*This includes one student who died as a result of a motorcycle accident during the second semester.

The results of the professor evaluations and the student self-evaluations are given next. Each professor was asked to complete an evaluation sheet (Appendix, page 1) for each PSDS student taking course work from him.

The professor responses were averaged for each student to obtain the scores used in the analysis. The students were asked to complete a similar questionnaire (Appendix, page 2) for each class taken; these also were averaged to obtain each student's self rating. In addition, the students were asked to respond to seven questions of more general nature (Appendix, page 3).

The questions were scaled, except as noted in the table, from one to five, with five being the score associated with greater success. For example, the question, "In your opinion, what is this student's potential ability in your subject area?" (low, below average, average, above average, high), would be coded with 1 for low, 2 for below average, . . ., and 5 for high. A mean of 2.89 on this scale would indicate potential in the subject matter slightly below the average. Table II gives the means, with standard deviations in parentheses, for professor responses for the fall semester 1968 and the spring semester 1969. Table III shows the student self responses for the same semesters.

Table II

Professor Evaluations of
Student Success

(Means with Standard Deviations in Parentheses)

Question	Semester I (N=34)	Semester II (N=34)
Knowledge of Student	2.94 (.87)	3.03 (.64)
Number of Conferences*	3.66 (2.31)	3.03 (2.20)
Chance of Success in College	3.04 (.67)	3.22 (.66)
Potential in Subject Area	2.89 (.68)	3.18 (.73)
Over-all Performance	2.34 (.88)	2.84 (.83)
Attendance	3.42 (.97)	2.88 (1.05)
Quantity of Participation	2.60 (.92)	2.86 (1.00)
Quality of Participation	2.76 (.66)	2.98 (.77)
Interest in Subject	3.31 (.79)	3.20 (.84)
Test Performance	2.14 (.80)	2.58 (.80)
Papers and Reports	2.60 (.78)	3.04 (.82)
Over-all Improvement	3.07 (.93)	3.20 (.84)
Average Performance**	19.79 (4.03)	20.72 (5.22)
Acceptance by Other Class Members	3.44 (.85)	3.60 (.59)

*Coded as actual number of conferences reported, with nine or more coded as nine.

**This score is a total of the questions dealing with attendance, quantity and quality of participation, interest in subject matter, test performance, papers and written reports and improvement. The possible range of scores is from 7 to 35, with 21 representing average.

Table III

Student Self Evaluation
of Success

(Means with Standard Deviations in Parentheses)

Questions	Semester I (N=33)	Semester II (N=33)
Knowledge of Professor	3.24 (1.04)	3.56 (.71)
Number of Conferences*	3.45 (2.49)	3.79 (.54)
Degree of Motivation	3.29 (.67)	3.37 (.67)
Potential in Subject Area	3.58 (.60)	3.82 (.66)
Over-all Performance	2.85 (.63)	3.34 (.52)
Attendance	3.80 (.66)	3.45 (.57)
Quantity of Participation	3.04 (.67)	3.26 (.70)
Quality of Participation	3.13 (.58)	3.32 (.66)
Interest in Subject	3.59 (.68)	3.90 (.65)
Test Performance	2.97 (.79)	3.38 (.64)
Papers and Reports	3.10 (.60)	3.58 (.67)
Over-all Improvement	3.28 (.56)	3.65 (.53)
Average Performance**	22.92 (3.26)	24.41 (3.38)
Class Acceptance	3.26 (.81)	3.62 (.72)
Chance of Success in College	3.51 (.87)	3.73 (.84)
Degree of Success thus far in PSDS	3.76 (.90)	3.90 (.66)
Extent to Which Own Goals Reached	3.24 (1.09)	3.61 (1.00)
Career Choice	3.64 (1.17)	3.36 (1.11)
Change in Self Confidence***	7.91 (3.06)	8.82 (2.19)
Popularity on Campus	3.21 (.78)	3.21 (.65)

*Coded as actual number of conferences reported, with nine or more coded as nine.

**This score is a total of the questions dealing with attendance, quantity and quality of participation, interest in subject matter, test performance, papers and written reports and improvement. The possible range of scores is from 7 to 35, with 21 representing average.

***This possible range of scores on this variable is from 1 to 11, with 1 indicating decreased very much, 6 stayed the same and 11 increased very much.

It should be noted that only those students who completed the second semester were included in the analysis for the first semester; those four students who dropped during the first two semesters (see Table I) were not included. Incomplete data are the cause of fluctuations in sample size from testing to testing.

The professor's first semester evaluations showed the PSDS students to be at or slightly below average on most measures. The professors did, however, rate the students quite low on the test performance and over-all performance scales. There was a marked improvement in the second semester ratings by professors. Significant increases occurred in the categories of chance of success in college, student potential in subject area, over-all performance, and test performance. It is interesting and remarkable to note that students who did not have traditional qualifications for admission to the Claremont Colleges were rated by their professors

at the end of the second semester as having a better than average chance of success in college, better than average potential in subject area and an over-all performance rated just slightly below the average of other (non-PSDS) students at the Claremont Colleges.

The profile presented by the students is generally higher than the professor ratings, in many cases significantly so. The PSDS students evidently felt, even during their first semester at Claremont, quite competitive. They rated their over-all performance during the first semester as just slightly below average of regular college students, and their second semester ratings show the PSDS students reporting themselves well above the Claremont average. The PSDS students, like their professors, felt that they improved greatly from semester one to semester two, with significant differences occurring in the categories of potential in subject area, over-all performance, test performance, papers and reports, and over-all improvement, an extremely confident self-image. The variable measuring change in self-confidence indicated that after the first semester and to a greater extent, after the second semester, the students reported that they felt their self-confidence was increasing. Unfortunately, we do not have a direct measure of the level of self-confidence; while we know the students feel that it is increasing, we can only infer from other data gathered that it is presently at a high level.

The students generally felt that they had made good progress toward fulfilling their own goals and were quite optimistic about their success in the PSDS program. It appears, however, that these students were less able to make a career choice at the end of the second semester than they were at the end of the first.

While both students and professors felt that the PSDS students were readily accepted by other class members, the professors tended to rate the level of acceptance somewhat higher. PSDS students felt themselves to be little different from other Claremont students with respect to popularity on campus.

The general picture presented by the students is one of optimism and success. For students such as these, having in the past experienced many failures and handicaps in the educational system, this is indeed a hopeful sign, and an essential ingredient if they are to eventually complete their college education.

The grade point averages for the fall and spring semesters are given in Table I The cumulative grade point average and average number of classes taken is also shown

Table IV

Grade Point Average and Number of Classes

(Means with Standard Deviation in Parentheses)

	Semester I (N=34)	Semester II (N=33)	Cumulative (N=33)
GPA	1.97 (.73)	2.23 (.68)	2.20 (.62)
Number of Classes	3.48	3.93	3.70

The grade point averages obtained by the Students both first and second semester conflict somewhat with the students self-ratings. As would be expected, the grade point averages are consistant with the professor's overall and average performance ratings. They are lower than those given to a comparison group of regularly admitted freshman.[3]

Table I shows that twenty-two of the PSDS students were transferred to regular student status and enrolled as such for the fall semester 1969. Two of these students had been transferred to regular status at the end of the first semester. The table also indicates that twelve of the original forty PSDS students remained in the Program for a third semester. What follows will constitute a brief comparison between those that remained in PSDS and those that were transferred to regular status. Table V and Table VI show the professor ratings and the student self-ratings for these two groups for the fall and spring semesters.

Table V

A Comparison of Success Measures for PSDS and Regular Students-Professor Ratings

(Means with Standard Deviations in Parentheses)

Question	Semester I		Semester II	
	PSDS(N=11)	Regular(N=22)	PSDS(N=12)	Regular(N=21)
Knowledge of Student	3.06(.97)	2.87(.83)	3.13(.66)	3.05(.54)
Number of Conferences*	3.62(2.24)	3.68(2.40)	2.80(1.38)	3.29(2.48)
Chance of Success in College	2.91(.74)	3.10(.64)	3.23(.77)	3.30(.50)
Potential in Subject Area	2.99(.92)	2.84(.54)	3.14(.94)	3.26(.57)
Overall Performance	2.01(.72)	2.50(.92)	2.88(1.11)	2.89(.61)
Attendance	3.40(1.00)	3.34(.99)	2.65(1.17)	3.09(.92)
Quantity of Participation	2.42(.80)	2.69(.97)	2.98(1.08)	2.86(.96)
Quality of Participation	2.78(.64)	2.75(.69)	3.03(.87)	3.04(.64)
Interest in Subject	3.4(.86)	3.27(.77)	3.29(.90)	3.22(.74)
Test Performance	1.73(.60)	2.34(.81)	2.72(.99)	2.57(.65)
Papers and Reports	2.67(.93)	2.57(.72)	3.22(1.00)	3.00(.67)
Overall Improvement	2.89(1.12)	3.15(.85)	3.03(.92)	3.39(.70)
Average Performance**	19.11(3.80)	20.12(4.18)	21.15(6.46)	20.93(4.12)
Acceptance by Other Class Members	3.70(.87)	3.31(.81)	3.51(.61)	3.69(.59)

*Coded as actual number of conferences reported, with nine or more coded as nine.

**This score is a total of the questions dealing with attendance, quantity and quality of participation, interest in subject matter, test performance, papers and written reports, and improvement. The possible range of scores is from 7 to 35, with 21 representing average.

Table VI

A Comparison of Success Measures for PSDS and Regular Students-Student Self-Ratings

(Means with Standard Deviations in Parentheses)

Question	Semester I		Semester II	
	PSDS (N=10)	Regular (N=22)	PSDS (N=11)	Regular (N=22)
Knowledge of Professor	3.47 (142)	3.14 (.84)	3.35 (.68)	3.67 (.72)
Number of Conferences*	3.89 (2.70)	3.26 (2.43)	3.34 (3.50)	4.02 (2.82
Degree of Motivation	3.28 (.89)	3.29 (.56)	3.17 (.78)	3.47 (.61)
Potential in Subject Area	3.44 (.67)	3.65 (.58)	3.66 (.54)	3.90 (.71)
Over-all Performance	2.41 (.34)	3.04 (.63)	3.18 (.49)	3.42 (.53)
Attendance	3.87 (.74)	3.77 (.64)	3.49 (.56)	3.44 (.59)
Quantity of Participation	2.97 (.79)	3.07 (.63)	3.16 (.74)	3.31 (.69)
Quality of Participation	2.82 (.60)	3.27 (.52)	3.27 (.80)	3.35 (.60)
Interest in Subject	3.64 (.81)	3.57 (.63)	3.97 (.62)	3.86 (.68)
Test Performance	2.54 (.66)	3.16 (.78)	3.09 (.56)	3.52 (.65)
Papers and Reports	2.90 (.60)	3.19 (.59)	3.36 (.72)	3.70 (.63)
Over-all Improvement	3.01 (.64)	3.40 (.49)	3.76 (.48)	3.59 (.56)
Average Performance**	21.75 (4.12)	23.43 (2.76)	23.78 (3.59)	24.72 (3.31
Class Acceptance	3.87 (.65)	3.00 (.73)	3.89 (.76)	3.49 (.68)
Chance of Success in College	3.30 (.48)	3.61 (.99)	3.64 (.67)	3.77 (.92)
Degree of Success Thus Far in PSDS	3.50 (.85)	3.87 (.92)	3.82 (.75)	3.95 (.62)
Extent to Which Own Goals Reached	3.10 (.88)	3.30 (1.18)	3.82 (.98)	3.50 (1.02)
Career Choice	3.90 (1.10)	3.52 (1.20)	3.73 (1.01)	3.18 (1.14)
Change in Self Confidence***	8.67 (2.40)	7.61 (3.29)	8.55 (2.02)	8.96 (2.30)
Popularity on Campus	3.40 (.70)	3.13 (.81)	3.36 (.50)	3.14 (.71)

*Codes as actual number of conferences reported, with nine or more coded as nine.

**This score is a total of the questions dealing with attendance, quantity and quality of participation, interest in subject matter, test performance, papers and written reports and improvement. The possible range of scores is from 7 to 35, with 21 representing average.

***This possible range of scores on this variable is from 1 to 11, with 1 indicating decreased very much, 6 stayed the same and 11 increased very much.

Table VII gives the first semester, second semester, and cumulative grade point averages for both the students who transferred to regular status and those who remained in PSDS, as well as the average number of classes taken by the students in each group.

Table VII

Grade Point Averages and Number of Classes
for PSDS and Regular Students

(Means with Standard Deviation in Parentheses)

	Semester I		Semester II		Cumulative	
	PSDS (N=11)	Regular (N=22)	PSDS (N=12)	Regular (N=21)	PSDS (N=11)	Regular (N=21)
GPA	1.49 (.57)	2.20 (.70)	2.02 (.97)	2.35 (.43)	1.75 (.62)	2.12 (.42)
Number of Classes	3.42	3.50	4.00	3.91	3.71	3.69

The comparison of professor ratings reveals two notable differences between the two groups: the professor evaluation of the students with respect to others in the class and the students' performance on tests. Both of these differences occurred on first semester ratings, with the regular group scoring higher in both cases; no significant differences with respect to professor evaluations occurred during the second semester. Highly significant differences in grade point averages (Table VII), another professor rating, are exhibited between the two groups during the first semester, the PSDS group having a mean of about 1.49 (D+) for an average of 3.42 classes for the semester as opposed to a group mean of 2.20 (C+) for an average of 3.50 classes for those transferred to regular status. There was not a significant difference between grade point averages second semester; however, the difference manifest first semester seemed to carry over to the cumulative average, which was significantly different for the two groups.

The student self-ratings echoed the differences indicated by the professors first semester, that is, with respect to over-all performance and test performance; in addition the students showed a difference on the quality of participation scale. Response to the question dealing with acceptance by other class members revealed that the students transferred to regular status felt much less accepted than did those students who remained in PSDS. This difference was not reflected in the change in self-confidence or popularity on campus scales.

Only one major difference is evident in the student self ratings second semester; that is in the area of test performance. Those students transferred to regular status indicated a higher level of performance than those not transferred. It should be noted that this is perhaps a perceived difference rather than an actual one, since neither the professor ratings on test performance nor the grade point average second semester substantiates it.

Summary

This study analyzes the success of the students in the Program of Special Directed Studies after the first year. In addition to grade point averages, the traditional measure of college success, professor ratings and student self ratings along several dimensions are included.

Of the 40 students who entered the program, 6 have dropped, 12 are still enrolled in PSDS, and 22 have been transferred to regular status. The picture for those who are still enrolled in the Claremont Colleges, as PSDS or regular student,

is quite optimistic. While their grade point averages are somewhat lower than the average freshman's, the professors indicated at the end of the second semester that PSDS students had a better than average chance of success in college and in general rated PSDS students at about the same level as those students who did not enter college through PSDS.

The students' self descriptions were also encouraging, since they presented an extremely positive self-image. Their ratings at the end of the first semester and, to a greater extent, at the end of the second semester indicated that they felt they had a much better than average chance to succeed at Claremont and that their performance was slightly better than the average regularly enrolled college freshman.

In light of the fact that many of the PSDS students have experienced failures in their elementary and secondary education, it is extremely important that they not only achieve at the levels necessary to find success in college but also that they perceive themselves as being successful. It appears from this investigation that most of the students who enrolled in the PSDS program last fall are not only presently achieving at the required levels but are perceived by both the professors and themselves as being successful in their academic work.

A comparison of success measures between those students enrolled in PSDS for a third semester and those transferred to regular status revealed several noticable differences during the students' first semester work, specifically in grade point averages received and in the professor and student self-rating categories of over-all performance and test performance. The comparison also indicated that those students still enrolled in PSDS perceived greater acceptance by other class members than those who transferred to regular status.

There was only one significant difference second semester and that was the student self-rating on test performance, suggesting that students transferred to regular status perceived themselves as achieving at a higher level.

The decision to transfer some students to regular status and to retain others in the program for an additional semester or two seems to have been based, at least in part, on the ability of the student to adjust quickly to the college environment, to achieve at a high level and further, to maintain that level of achievement over the second semester. This data does not reveal as clear a difference between these two groups as one might have otherwise supposed to exist.

Footnotes

1. The Claremont Colleges, "Program of Special Directed Studies for Transition to College: A Proposal," (Claremont, California: 1968), mimeo.

2. Additional variables in the multivariate success cluster are currently being analyzed by Professor Stuart Oskamp, Patricia Friedlander and Kathy Seric Thompson. Their work will also include an analysis of success responses from the Deans of Students of the various colleges and a comparison on these measures to a control group of regularly admitted college freshmen.

3. See Spuck, Dennis W., "A Comparison of Students Enrolled in the Program of Special Directed Studies and Students Regularly Enrolled at the Claremont Colleges," (Claremont, California: October, 1969), mimeo.

Name_____

In your opinion, what are your chances of succeeding in college? (Circle one). (Little, below average, average, above average, great)

In your opinion, what has been your degree of success in the PSDS program so far? (Circle one). (Very little, little, some, much, very much)

To what extent do you feel that you have reached or are reaching your own academic goals? (Circle one). (Very little, little, some, much, very much)

To what extent have you made a definite choice of your future career? (Circle one). (Very little, little, some, much, very much)

If you have made a somewhat definite choice of your future career, what steps have you taken to begin to move toward that career goal? (Please be specific).

Since coming to college at Claremont, how have you changed in your general level of self-esteem and self-confidence? (Circle one). (Increased, stayed the same, decreased)

If you have increased or decreased in your general level of self-esteem and self-confidence, to what extent have you changed? (Circle one).
(Very little, little, some, much, very much)

In your opinion, how do you rate in comparison with other freshmen at the Claremont Colleges in popularity on campus? (Circle one). (Low, below average, average, above average, high)

Student's name_____ Professor's name_____
Class_____

How well do you feel that you know the professor of this course? (Circle one). (Very little, little, average knowledge, well, very well)

How many times (approx.) did you have an individual conference with this professor during the course of the semester? _____

In your opinion, to what degree were you motivated in this class? (Circle one). (Little, below average, average, above average, great)

In your opinion, what is your potential ability in this subject area? (Circle one). (Low, below average, average, above average, high)

In comparison to others in the class, how would you describe your overall performance? (Circle one). (Low, below average, average, above average, high)

With respect to the other students in the class, how would you rate yourself in the following areas: (Circle one number in each row). (Low-1, below average-2, average-3, above average-4, high-5).

attendance	1	2	3	4	5
quantity of participation in class discussion	1	2	3	4	5
quality of participation in class discussion	1	2	3	4	5
interest in subject matter	1	2	3	4	5
test performance	1	2	3	4	5
papers and written reports	1	2	3	4	5
improvement in general class performance during semester	1	2	3	4	5
acceptance by other class members	1	2	3	4	5

Please record below any other comments that you feel would help us to evaluate your achievement in this class. Thank you for your help.

Return to: Program of Special Directed Studies
1009 North College Avenue
Claremont, Caliofrnia 91711

Student's name_____ Professor's name_____
Class_____

How well do you feel you know this student? (Circle one). (Very little, little, average knowledge, well, very well)

How many times (approx.) did this student have an individual conference with you during the course of the semester? _____.

In your opinion, what are this student's chances of succeeding in college? (Circle one). (Little, below average, average, above average, great)

In your opinion, what is this student's potential ability in your subject area? (Circle one) (Low, below average, average, above average, high)

In comparison to others in the class, how would you describe this student's overall performance? (Circle one). (Low, below average, average, above average, high)

With respect to the other students in the class, how would you rate this student in the following areas: (Circle one number in each row). (Low-1, below average-2, average-3, above average-4, high-5)

attendance	1	2	3	4	5
quantity of participation in class discussion	1	2	3	4	5
quality of participation in class discussion	1	2	3	4	5
interest in subject matter	1	2	3	4	5
test performance	1	2	3	4	5
papers and written reports	1	2	3	4	5
improvement in general class performance during semester	1	2	3	4	5
acceptance by other class members	1	2	3	4	5

Please record below any other comments that you feel would help us to evaluate this student's achievement in your class. Thank you for your help.

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